

ENCLOSURE 1

Table 1. Blackfoot Headwaters TMDL Planning Area Metals TMDL Summay Information.

Water Bodies & Pollutants of Concern	<p><u>30 individual water body/pollutant combinations addressed as follows:</u></p> <ul style="list-style-type: none"> - Blackfoot River above Landers Fork (pollutants: cadmium, copper, iron, lead, manganese, zinc) - Blackfoot River below Landers Fork (pollutants: aluminum, cadmium, iron, zinc) - Beartrap Creek (pollutants: cadmium, copper, iron, lead, manganese, zinc) - Mike Horse Creek (pollutants: aluminum, cadmium, copper, iron, lead, manganese, zinc) - Sandbar Creek (pollutants: aluminum, copper, iron, manganese) - Poorman Creek (pollutants: cadmium, copper, lead)
Impaired Beneficial Uses	<ul style="list-style-type: none"> - Blackfoot River above Landers Fork (impaired uses: aquatic life; cold water fish; drinking water supply) - Blackfoot River below Landers Fork (impaired uses: aquatic life; cold water fish) - Beartrap Creek (impaired uses: aquatic life; cold water fish; drinking water supply) - Mike Horse Creek (impaired uses: aquatic life; cold water fish; drinking water supply) - Sandbar Creek (impaired uses: aquatic life; cold water fish; drinking water supply) - Poorman Creek (impaired uses: aquatic life; cold water fish)
Pollutant Sources	<ul style="list-style-type: none"> - Metals: Mine disturbances, natural background
Target Development Strategies	<ul style="list-style-type: none"> - Numeric metals concentrations in water column for aquatic life/fishery and for drinking water/domestic use support; hardness adjustments to numeric targets must be incorporated - Elimination of objectionable deposits from metal precipitates - Metals in stream sediments may not impede beneficial uses - Biota (periphyton, macroinvertebrate) equal to or better than reference conditions
TMDLs	<ul style="list-style-type: none"> - Based on numeric concentration targets multiplied by stream flow (all metals, various flow conditions)

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Allocations	<ul style="list-style-type: none">- Performance-based load allocations for mine disturbances in the Upper Blackfoot Mining Complex (UBMC) (applies to all metals TMDLs in Mike Horse and Beartrap Creeks and the Blackfoot River)- Performance based waste load allocation for discharge permit based on meeting water quality standards either within the discharge or within the mixing zone (applies to multiple metals from a wetlands treatment system permitted discharge within the UBMC)- Additional load allocations to tributary drainages where future monitoring identifies metals impairment conditions; (applies to specific metals associated with tributary impairment conditions and could result in additional load reductions for metals of concern in the Blackfoot River)- Load allocations to identified mining sources and natural background loads so that TMDL conditions are satisfied (applies to metals in Sandbar and Poorman Creek drainages)
Restoration Strategies	<ul style="list-style-type: none">- UBMC restoration efforts currently underway for mine disturbances as identified within the temporary water quality standards (primary restoration approach for Mike Horse and Beartrap Creeks and the Blackfoot River)- Further characterization of identified mine disturbances in tributary drainages not covered by the UBMC (Sandbar Creek, Poorman Creek/Swansea Gulch)- Further characterization of Poorman Creek and Willow Creek to better define impairment conditions and/or loading sources- Monitoring of key tributary drainages to the Blackfoot River where impairment conditions have yet to be fully evaluated and subsequent identification and characterization of significant metals sources (Seven Up-Pete, Alice, Hogum, Hardscrabble Creeks, others)- Pursue restoration for significant mining and other metals sources within tributary drainages outside UBMC responsibilities (Poorman/Swansea, Sandbar Creek, other tributary streams where appropriate)- Adaptive management approach based on water quality monitoring and implementation of restoration activities (all water bodies)
Margin of Safety	<ul style="list-style-type: none">- Metals targets apply during various flow conditions with considerations for changing hardness conditions- Adaptive management approach that commits to future monitoring and assessment- Built in margins of safety within existing numeric water quality standards- Application of most protective numeric standards, typically the chronic aquatic life standard- Addition of biota targets and sediment chemistry targets- Impairment determinations consider all relevant data and seasonality in a conservative manner- Significant monitoring efforts associated with metals related watershed characterization and restoration efforts

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Seasonal Considerations	<ul style="list-style-type: none">- Metals impairment and loading conditions evaluated at various flow conditions- Metals TMDLs incorporate stream flow as part of the TMDL equation- Metals targets apply during various flow conditions with considerations for changing hardness conditions- Existing and future monitoring addresses varying flow conditions
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